

CLAIMS

What is claimed is:

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1. A film comprising:

a biodegradable polymer; and
a water soluble polymer,

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wherein the film is breathable and has a water vapor transmission rate greater than about 500 g/m²/24hrs.

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2. The film of Claim 1, wherein the biodegradable polymer is an aliphatic polyester.

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3. The film of Claim 1, wherein the biodegradable polymer is selected from the group consisting of polycaprolactone, polybutylene succinate, poly(butylene succinate-adipate), polylactic acid, terpolymers of terephthalic acid, adipic acid, and 1,4-butanediol, and copolymers and mixtures thereof.

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4. The film of Claim 1, wherein the water soluble polymer is selected from the group consisting of polyethylene oxide, polyethylene glycol, polyvinyl alcohol, and copolymers and mixtures thereof.

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5. The film of Claim 1, wherein the water soluble polymer is polyethylene oxide, polyethylene glycol or a copolymer thereof.

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6. The film of Claim 1 having a water vapor transmission rate greater than about 1000 g/m²/24hrs.

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7. The film of Claim 1 having a water vapor transmission rate greater than about 1500 g/m²/24 hrs

8. The film of Claim 1, wherein the film includes from about 30% to about 95% biodegradable polymer by weight of the film.

9. The film of Claim 1, wherein the film includes from about 50% to about 75% biodegradable polymer by weight of the film.

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10. The film of Claim 1, wherein the film includes from about 5% to about 70% water soluble polymer by weight of the film.

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11. The film of Claim 1, wherein the film includes from about 15% to about 50% water soluble polymer by weight of the film.

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12. The film of Claim 1 having an elongation at break of greater than about 350%.

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13. The film of Claim 1 having an elongation at break of greater than about 450%.

TELETYPE TRANSMISSION

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14. The film of Claim 1 having a thickness of from about 0.01 to about 5 mils.

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15. The film of Claim 1 having a thickness of from about 0.01 to about 2 mils.

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16. The film of Claim 1, wherein the biodegradable polymer is polycaprolactone and the water soluble polymer is polyethylene oxide.

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17. The film of Claim 1, wherein the film is a precursor film.

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18. The film of Claim 1, wherein the film is biodegradable.

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19. The film of Claim 18 having a water vapor transmission rate of greater than about 2500 g/m²/24hrs.

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20. The film of Claim 18 having a water vapor transmission rate of greater than about 3000 g/m²/24hrs.

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- 5 21. The film of Claim 18 having a water vapor transmission rate of greater than about 3500 g/m²/24hrs.

10 22. The film of Claim 18 having an elongation at break of greater than about 100%.

15 23. The film of Claim 18 having an elongation at break of greater than about 200%.

20 24. The film of Claim 18, wherein the film includes from about 1% to about 50% water soluble polymer by weight of the film.

25 25. The film of Claim 18, wherein the film includes from about 5% to about 30% water soluble polymer by weight of the film.

30 26. The film of Claim 18, wherein the film includes from about 50% to about 99% biodegradable polymer by weight of the film.

35 27. The film of Claim 18, wherein the film includes from about 70% to about 95% biodegradable polymer by weight of the film.

40 28. The film of Claim 18 having a thickness of from about 0.01 to about 5 mils.

45 29. The film of Claim 18 having a thickness of from about 0.01 to about 5 mils.

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